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TRENDS AND PROSPECTS FOR MARKETING TEXTILES 1/

Market Outlets

Market outlets for American cotton and wool continue to be restricted by greatly increased competition from cotton and wool produced in other countries and from manmade fibers produced in the United States and abroad. Among the factors that adversely affect market outlets for these products are increases in production of foreign-grown cotton and wool and of manmade fibers, improvements in the quality or suitability of these fibers, and availability of increased quantities of the competing products at attractive prices.

The proportion of total world production of cotton, wool, and manmade fibers accounted for by American cotton decreased from more than 50 percent in the early 1930's to less than 20 percent in the late 1950's. The corresponding proportion for domestic wool decreased from 1.4 percent to 0.4 percent, whereas the proportion for manmade fibers increased from less than 5 percent to more than 20 percent during this period. Further increases in production of foreign-grown cotton and wool and of manmade fibers are to be expected.

Prices of cotton and wool produced in the United States in most recent years have been maintained above their normal free-market relationship with those of other growths, and prices of manmade fibers have declined in relation to domestic prices of cotton and wool. Equivalent prices of rayon staple fibers declined from an average of 118 percent higher then those of Middling 15/16-inch cotton during the 5 years ended July 1939 to 20 percent below prices of this cotton during the 5 years ended July 1958. Prices of rayon staple fibers averaged about 36 percent of prices of fine good French combing and staple wool during the 5 years ended with 1938 and declined to an average of 26 percent during the 5 years ended with 1958. Prices of other manmade fibers, especially the newer noncellulosic ones, declined in recent years as much as, or more than, prices of rayon relative to those of cotton and wool.

Changes in price relationships were associated with substantial increases in consumption of foreign-grown cotton and wool and of manmade fibers in relation to consumption of American cotton and wool. The proportion of total world consumption of all cotton accounted for by American decreased from an average of 57 percent during the 5 years ended with 1932 to about 30 percent during the 5 years ended with 1958. Consumption of wool produced in the United States decreased from about 10 percent of the world total for all wool during the 5 years ended with 1938 to 6 percent during the 5 years ended with 1958.

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Reprinted from The Marketing and Transportation Situation, Nov. 1959. AMS-351.

U.S. Department of Agriculture, Agricultural Marketing Service, Marketing Economics Research Division

In the United States, consumption of manmade fibers increased from less than 3 percent of that for cotton during the 5 years ended in 1939 to 40 percent during the 5 years ended with 1958. Domestic mill consumption of manmade fibers increased from about 81 percent of that for wool during the 5 years ended with 1938 to about 435 percent during the 5 years ended with 1958.

Prospects and Problems

It is apparent from these developments that cotton and wool produced in the United States are confronted with greatly increased competition. With the prospect of further expansions in production of competing products, inadequate market outlets for our cotton and wool at remunerative prices may continue to limit the cotton and wool industries in this country, unless prompt and effective actions are taken to maintain or expand consumption of these products. Given a reasonably prosperous peacetime economy and further increases in population, prospective demands for textiles indicate the possibility of maintaining or expanding consumption of our cotton and wool, if all potential market outlets are fully exploited.

To exploit fully these outlets for cotton and wool would require:

(1) Adequate and dependable supplies of suitable qualities of raw cotton and wool, readily available to manufacturers at competitive prices; (2) efficient manufacture of a variety of suitable and attractive cotton and wool fabrics, appropriately finished and made available at attractive prices for use in industry and in fabricating apparel and household products; (3) suitable and attractive styling and good construction of apparel and household products made of cotton and wool fabrics; (4) education of consumers regarding the quality, variety, and adaptability of these products; (5) timely adjustments in the manufacture and distribution of these products to meet consumer requirements; and (6) increased efficiency in the entire chain of marketing, manufacturing, and distributing procedures so that a variety of suitable and attractive products made of cotton and wool are made readily available to consumers at competitive prices.

Cotton and wool compete with manmade fibers and other products as raw materials, as yarns and fabrics, and as fabricated products. Effectiveness of this competition may be largely influenced by differences between the quality, suitability, and prices of cotton and wool and their products and the quality, suitability, and prices of competing products. Among important factors that may affect the quality, suitability, and cost of textile products at each stage of marketing, manufacturing, and distributing are the size and organization of the operating units, techniques and equipment used, and operating methods and practices, along with the kinds and qualities of materials used.

Taking cotton and wool from farms and ranches and delivering them in the form of finished clothing and household textiles to ultimate consumers require the services of assembling and merchandising raw cotton and wool, manufacturing yarns and fabrics, fabricating apparel and household textiles, and distributing the products to ultimate consumers. Combined charges for these services for cotton products decreased from about 91

percent of the consumer's dollar spent for these finished products in 1938 to about 84 percent in 1951 and amounted to about 85 percent in 1957. Similar margins for wool products decreased from about 88 percent in 1939 to 86 percent in 1957. Charges for marketing raw cotton and wool accounted for about 3 percent of the consumer's dollar in 1957. Those for manufacturing yarns and fabrics and for fabricating apparel and household textiles accounted for 42 percent and those for wholesale and retail distribution accounted for 41 percent of the consumer's dollar that year.

The size of these margins and the seriousness of the threat of increased competition from manmade fibers and other products emphasize the importance of information that will show the influence of the different factors on the efficiency and costs of marketing and that will indicate means of improvement. Such information relating to the services at each important stage of marketing, manufacturing, and distributing procedures for cotton and wool is presented in about the order in which the services are rendered.

Marketing Raw Cotton and Wool

Cotton

Charges for marketing raw cotton increased from an average of 2.6 cents a pound of lint in 1939 to 6.5 cents in 1957. These charges increased further in 1958. The proportion of the cost of cotton to mills accounted for by these charges increased from about 12 percent in 1947 to 19 percent in 1957.

Changes made in ginning and merchandising cotton have been considerable since 1945. From 1945 to 1959, the number of cotton gins in the United States decreased about 40 percent and average number of bales ginned per gin plant increased about 140 percent. The proportion of the crop that was rough-harvested increased from about 24 percent in 1947 to about 56 percent in 1958 and the number of gins with equipment for conditioning and cleaning seed cotton increased considerably during this period. Gins with equipment for cleaning lint cotton increased from less than a third in 1954 to more than half in 1957, and further sharp increases in 1958 and 1959 are indicated. The number of automatic samplers at gins increased from less than 50 in 1957 to more than three times that number in 1958. Gins with equipment for compressing cotton to a smaller volume increased from 109 in 1956 to about 130 in 1959. During the 1950's, the number of cotton shippers has decreased, direct buying in producing areas by mills has increased, and the demand for measures of fineness and strength of fibers as a basis for buying and selling has increased. In the 1956-57 marketing year, about 57 percent of the 9.1 million bales obtained by shippers in the open market were sold on the basis of fineness measurements and more than 60 percent were sold on the basis of minimum strength specification. About 73 percent of the 6.5 million bales obtained from the Commodity Credit Corporation were tested for fineness of fibers after purchase.

Additional changes needed include: (1) Improvements in the operation of suitable conditioning, cleaning, and ginning equipment; (2) utilization

of this equipment to nearer full capacity for a longer time per year; (3) use of improved automatic samplers and higher density presses at more of the larger gins; (4) installation of improved facilities and equipment for handling cotton at additional compresses and warehouses; (5) improved bagging and handling practices for bales to reduce contamination of lint; and (6) development of more adequate and dependable classification (based on reasonably adequate measures of all important quality elements) and market information services upon the basis of which the sale and purchase of cotton on description can be expanded.

Wool

Charges for marketing raw wool increased with advances in prices, and in 1957 they averaged about two-thirds greater than in 1946. Charges for marketing grease wool sold in original bags in 1946 averaged 6.8 cents a pound, or 16 percent of the Boston price. Charges for graded and scoured wool averaged more than those for grease wool sold in original bags by amounts approximating charges for grading and scouring.

Developments since the end of World War II in marketing raw wool include more preparation of wool for marketing in producing areas, especially grading, coretesting, scouring, and baling. Grading of wool at warehouses is becoming more common and necessary and in 1956 more than a third of the wool handled by warehouses in producing areas was graded. Coring bagged wool to obtain samples for use in determining the yield and quality of the wool increased markedly in the postwar period and in 1956 almost a third of the wool handled by warehouses in producing areas was coretested. The scouring of wool in producing areas increased during the 1950's; in 1956, about a fifth of the wool handled by warehouses in Texas was scoured, about a tenth of that handled by warehouses in the 11 Western States, and smaller proportions of that handled by warehouses in Central and Eastern States.

The baling of wool into denser packages to facilitate handling, storage, and transportation increased markedly during the middle and late 1950's. In 1956 more than half of the wool handled by warehouses in Texas was baled. About a tenth of that handled by warehouses in the 11 Western States and smaller proportions of that handled by warehouses in Central and Eastern States were baled that year. Since 1956 several warehouses have installed balers for wool. Marked changes in transporation facilities used were associated with increases in proportion of the wool baled. In Texas, for example, before 1952 practically all the wool produced was shipped to eastern markets by rail or water, but by 1956 almost all of Texas wool was shipped by truck.

Additional changes needed include: (1) Improved preparation of wool for marketing and manufacture at or near points of origin; (2) increased use of improved facilities and equipment for handling, preparing, and storing wool at warehouses; (3) improved packaging of wool, including more compressing into suitable bales to facilitate handling, transportation, and storage; (4) the use of suitable bagging to prevent contamination of the wool; and (5) development of more adequate and dependable classification

and market information services upon the basis of which the sale and purchase of wool on description can be expanded.

An adequate classification and market information service would require: (1) That differences in all important quality elements of wool be ascertained and evaluated; (2) that the sample used be truly representative of the quality or qualities of wool included in the lot and that it be correctly identified with the lot from which it was taken; (3) that the evaluations be made in accordance with uniform standards upon the basis of which differences in all important quality elements of wool can be described for commercial purposes with reasonable accuracy; (4) that the evaluations be made by competent and reliable classifiers under conditions conducive to accurate evaluation; and (5) that facilities be provided for taking and assembling the samples, recording the evaluations on convenient forms, and for making this information available to sellers and to buyers in time for them to use it in selling and buying the wool.

Manufacture of Yarns and Fabrics

Gross margins of manufacturers of cotton and wool yarns and fabrics decreased from an average of about 15 percent of the retail value of the finished apparel and household textiles made of cotton and wool in 1947 to about 13 percent in 1957. With advances in wage rates and other deveopments, proportions of these margins that were accounted for by costs of labor increased markedly through 1957. Average value added by manufacture per dollar of wages decreased from 1947 to 1957 despite substantial improvements in plant and equipment.

Improvements in the manufacture of yarns and fabrics may result from modernizing the equipment, organization, and manufacturing operations, and from using the qualities of raw materials relatively best adapted, physically and economically, to the production of specified products.

Improvements in equipment and in manufacturing operations have been made in recent years, but further modernization is greatly needed. Reports of editors of Textile World indicate that during the 10 years 1948-57, the textile industry spent $4.4 billion for new plant and equipment, about $3.5 billion of which was for machinery, and productivity per man-hour rose 67 percent. Yet it was estimated that fully 65 percent of the textile manufacturing equipment was obsolete in 1957. Textile manufacturers who were replacing old facilities with new plant and equipment in 1958 indicated that 37 percent of them expected these replacement expenditures to pay for themselves in 1 or 2 years, 47 percent in 3 to 5 years, and 16 percent in 6 or more years.

Mergers and acquisitions in the textile industry in recent years have changed the organization and management of many operating units engaged in the manufacture of yarns and fabrics. These changes reached relatively high rates in the late 1940's and middle 1950's and were associated with some decreases in average size of manufacturing establishments, as measured by number of employees. Census data for 1954 show that 38 percent of the mills processing cotton, rayon, and related fibers, with less than 11 percent

of the looms, did weaving only. Half of the mills, with 74 percent of the looms and 84 percent of the spindles, manufactured yarns and also wove the yarn into fabrics. Only about 12 percent of the mills finished the yarns and fabrics manufactured. In wool manufacture, about 75 percent of the mills, with more than 75 percent of the looms, manufactured yarn and wool into fabrics.

The use of more suitable qualities of cotton and wool in the manufacture of specified products is needed to improve efficiency. A determination of the more suitable qualities of cotton and wool for these products might well be based on detailed analysis of mill operations, under controlled conditions, to show differences in value for mill purposes of cotton and wool of different qualities. Differences in value for mill purposes are based on differences in processing costs and in quality or value of the products, as a result of differences in quality of the cotton or wool used. Data showing such differences in value for mill purposes and data showing differences in costs of the cotton or wool used as a result of differences in quality, would need to be combined to show the quality of cotton or wool relatively best adapted to the production of specified products. Some progress has been made in developing techniques for measuring differences in some properties of cotton and wool fibers. But techniques need to be developed for measuring other important quality elements of cotton and wool and for more accurate evaluations of most of the quality elements.

Some of the more promising means of increasing efficiency and reducing costs of manufacturing cotton and wool yarns and fabrics include: (1) Increased use of new and modern machinery, especially the automatic types; (2) some modernization of buildings and arrangement of machinery for more direct flow of work and more efficient operation; (3) full machine assignment per man and equalization of reasonable workloads for employees; and (4) adjustments in size of operating units and in variety of yarns and fabrics produced. A 1958 report on operating costs in the textile industry indicated that by the use of these means labor costs to mills can be cut by amounts ranging up to 80 percent in the various manufacturing operations.

Manufacture of Apparel and Household Textiles

Gross margins for manufacturers of apparel and other fabricated textile products increased somewhat in recent years; in 1957 they amounted to 29.5 percent of the retail value. The proportion of gross margins accounted for by costs of labor increased from 35 percent in 1947 to 39 percent in 1954. Average value added by manufacture per dollar of wages increased from 1939 to 1947, with marked advances in retail prices, then decreased to 1957, despite substantial improvements in machinery used.

Improvements in the manufacture of apparel and related products might well include more attractive styling and good construction of products, installation and use of modern facilities and equipment, adjustments in sizes of plants to facilitate effective use of the more efficient equipment and methods, and development of labor-relations programs that would enlist the cooperation of both labor and management in formulating and carrying out plans to modernize establishments for efficient operation. Modernization

of plants might well be supplemented by in-service training programs to improve the skill of employees; by (1) assigning the right men to the right jobs, so as to utilize fully the natural capacities and developed skills of employees; (2) systematic advancements in accordance with ability and demonstrated performance, to encourage initiative and efficiency; and (3) prompt and effective means for locating and removing causes of labor turnover and costly slowups in production. Modernization of plants and utilization of workers to their full potentialities, to the mutual benefit of workers and management, apparently offer important means of reducing costs of manufacturing apparel and household textiles.

Combining two or more of the successive links in the chain of manufacturing and distributing processes for fabricated textile products may be an important means of achieving economies and a closer linkage between production planning and ultimate consumer requirements. Developments during World War II were favorable, in some respects, to the extension of unified control. Integration in the textile industry in the middle 1950's apparently indicates a continuing, and perhaps a growing, interest in possibilities of further combinations. Census data for 1954 show that the value added by manufacture of women's and children's clothing and of men's and boys' clothing per dollar of payroll averaged greater for multiunit than for single-unit companies. For multiunit companies, value added per dollar of payroll averaged greater for multi-industry companies than for single-industry companies. But additional information relating to economic possibilities of, and limitations to, both horizontal and vertical integration is needed as a basis for adequate appraisals.

Wholesale and Retail Distribution of Textiles

Gross margins for wholesale dry goods houses increased in recent years and averaged about 17 percent of net sales in 1957, compared with 16 percent in 1939 and a high of almost 19 percent in the early 1940's. Margins per dollar of sales usually average less for establishments with large volume of sales than for those with small volumes. Selling and administrative expenses account for most of the wholesalers' gross margins. Profits usually amount to less than 3 percent of net sales.

Retailers' gross margins, as indicated by data for department stores, averaged 36.2 percent of net sales in 1958, about the same as in other recent years but somewhat above the low point of 35.2 percent reached in 1949. Payroll expense, the largest item of cost, averaged 18.0 percent of net sales in 1958, about the same as in other recent years but somewhat higher than the low point of 15.4 percent in 1945. Operating profits, amounting to 2.4 percent of net sales in 1958, were only slightly lower than those in the preceding 5 years; but they were lower than those in any other year since 1952.

Means of reducing costs of distributing textile products include methods of increasing the general efficiency of existing agencies, concentration of services in the hands of agencies or combinations of agencies that can render them most efficiently, and reductions in "unnecessary" services. Improvements in general efficiency of the

agencies involve problems of organization and operation, selection and management of personnel, location of places of business, number and kinds of commodities handled, volume of operations, and purchase and sales policies, among others. Detailed information on the influences of each important factor on efficiency and costs is needed to indicate the extent to which it would be feasible to bring about improvements and the most effective means for achieving them.

Wholesalers' gross margins may be reduced by adjusting to more nearly optimum the volumes handled, particularly by the smaller operators. In 1954, operating expenses per dollar of net sales of apparel by merchant wholesalers averaged about half as great for operators with annual sales of over $2 million as for those with annual sales of less than $50,000. Although factors other than size may also be involved, a part of these differences in operating expenses may result from differences in volume of sales.

Retailers' margins might be reduced by simplifying the selling process so as to permit and encourage self-selection and self-service by customers. This simplification may be facilitated by open display of merchandise, arranged on the basis of consumers' primary interests, such as size and price, and by arrangements for payment at a convenient desk set up for that purpose. Such simplification makes possible reductions in retail margins mainly by reducing payroll costs, which average more than half of the total operating expenses of retailers. Accurate labeling to show the quality and size of the products, on the basis of adequate standards, would facilitate self-service methods. These and other economies in retailing would make possible substantial reductions in costs of distributing textile products, to the advantage of farm producers and consumers.

Importance of Reducing Charges

The relative importance, from the viewpoint of costs, of increasing efficiency and of reducing the margins for manufacturing and distributing textile products is indicated by recent data. A reduction of 10 percent, for example, in these combined margins in 1957 would have amounted to about 8.6 percent of the costs of the finished products to ultimate consumers, to about two-thirds of the gross returns to farmers for the cotton and wool used, and to about three times the total costs of marketing the raw fibers, including the ginning and baling of cotton but excluding the scouring of wool. A reduction of 10 percent in costs of manufacturing textiles, including the fabrication of apparel and household textiles, would have amounted to about 4.2 percent of the costs of the finished products to consumers, to about a third of the gross returns to farmers for the cotton and wool used, and substantially more than the total costs of marketing the raw fibers. A reduction of 10 percent in costs of retailing, during this period, would have amounted to more than total costs of marketing the raw fibers used and to more than a fourth of the gross returns to farmers for the cotton and wool used.